

**Notes on Fresh Water Alga.**—To my note under this heading in the last GAZETTE I wish to add that it may be a question whether *Rivularia glutans* should not be referred to *Echinella articulata*, Ag. That species is known to me only through the figure in English botany and the figure given by Phillips in *Grevillea*, Vol. IX., pl. 144, a-d. From the figure in Eng. Bot. not much information can be derived, but from that in *Grevillea*, which appears to be referred without hesitation to *Echinella articulata*, Ag., one can not fail to see a close resemblance to the alga collected by Prof. Arthur, with which it also agrees in its peculiar habitat.—W. G. FARLOW.

**Chloranthy of Ranunculus Californicus.**—Green Buttercups are unusually common about San Francisco Bay this season. The persistent floral organs (excepting the almost normal yellowish stamens) are as green as the ordinary foliage. The spoon-shaped sepals are not reflexed; the hairy petals have ovate blades only two lines long, borne on slender petioles three to six lines in length. The nectariferous scales are plainly seen at the bases of the blades. Most of the capillary leaves become stipitate empty akenes, but some are open on the inner side, and a few become oblanceolate leaves two or three lines in length.—VOLNEY RATTAN, *San Francisco, Cal.*

**Discharging Ascospores.**—In the January No. of the GAZETTE appeared an interesting account of the sound of discharging ascospores observed by Mr. E. W. Holway, Decorah, Iowa. I have this spring heard the same hissing sound on opening a box in which a number of *Peziza coccinea*, Jacq., had been inclosed for two hours.

I transcribe an extract from a letter written by the distinguished botanist Haller, Gottingen, Sept. 19, 1740, to the father of botany, Linnaeus, Upsal, Sweden: "The place where I am is but a barren field for botany excepting fungi, which are plentiful. I have detected a very curious elastic motion in the common sessile *Peziza*, of a dirty white hue. The whole plant contracts spontaneously and discharges a powder upwards with a sort of hissing sound. This doubtless is the seed." He furthermore says that "fungi are a mutable and treacherous tribe;" a fact just as apparent to-day as it was 143 years ago.—L. V. MORGAN, *Cincinnati, O.*

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## EDITORIAL NOTES.

SINCE THE NOTICE in the GAZETTE of the appearance of a supplement to Chapman's Flora, many inquiries have been made regarding it. A note from Dr. Chapman conveys the information that the new edition is now on sale with Ivison, Blakeman, Taylor & Co., N. Y., and Ashmead Bros., Jacksonville, Fla. The supplement is not sold separately, but is bound with the new edition.

MR. W. B. HEMSLEY, of the Kew Gardens, is preparing a work which will be practically a flora of the remote islets of the Atlantic and Southern Oceans. With regard to the Bermudas it may be that some of the readers of the GAZETTE may be able to give some help. The composition of the flora of the Bermudas

is found to contain more of the endemic element than was anticipated; and, among other things, it is suspected that there is at least one palm quite different from the continental American species. Good specimens of the native palm or palms would be very thankfully received at Kew, and any reader of this notice who will send such specimens will be doing a favor to botanists in general.

THE OTTAWA FIELD NATURALISTS' CLUB is an organization that it would be well for some of the brethren of the "States" to pattern after. It was established in 1879, and has now entered upon its fifth season of field work, the object being an exhaustive study of the natural history of Ottawa and vicinity. Transactions have already been published containing numerous lists. Excursions are made monthly, and leaders are appointed in each department who are looked to for information and assistance, and who have charge of the excursions of their department. The leaders in botany are R. B. Whyte and J. Fletcher for Phænogams, and Prof. J. Macoun for Cryptogams, Messrs. Whyte and Macoun being also the Vice-Presidents of the Club. Information as to the workings of the Club may be had by addressing the Secretary, W. H. Harrington.

AT THE LAST ANNUAL MEETING of the Syracuse Botanical Club the following officers were elected for the ensuing year: President, Mrs. Lillie Barnes; Vice-President, Mrs. Nellie Goodrich; Recording Secretary, Miss Mary Hotchkiss; Corresponding Secretary, Mrs. H. S. Gifford; Treasurer, Miss Hattie Leach.

DR. MASTERS has described before the Royal Horticultural Society a Malvaceous plant said to be a cross between *Hibiscus Rosa-sinensis* and *Abutilon striatum*, the former genus furnishing the pollen. The plant has the flower characters of *Abutilon*, but the truncated column and foliage of *Hibiscus*.

IN THE DESCRIPTION of *Phallus togatus*, Kalchbrenner, in the May GAZETTE, two errors are noted. In the measurements, "m. m." should be " $\mu$ "; and "pervio" should read "pervio."

MR. THOMAS MEEHAN has discovered sensitive stamens in *Echinocactus Whipplei*. This has long been known in our common *Opuntia*, but in this *Echinocactus* the motion is not so great, nor so immediate after the stimulus.

THE FOLLOWING SUMMARY by Mr. Bentham, taken from the *Jour. Bot.*, of the number of phanerogamic plants known to science is especially interesting now that the last volume of the *Genera Plantarum* has appeared:

	Orders.	Genera.	Species.
Polypetalæ.....	82	2,610	31,874
Gamopetalæ.....	45	2,619	34,556
Monochlamydæ.....	36	801	11,784
Gymnospermæ.....	3	44	415
Monocotyledons.....	34	1,495	18,576
Totals.....	200	7,569	97,205

PROF. J. G. LEMMON has read before the California Academy of Sciences a very interesting paper upon his discovery of the potato in Arizona, noticed before in these pages. Professor Lemmon's supply of potatoes has been exhausted, but he is off again to the Huachuca Mountains this fall for a fresh supply, which various cultivators will experiment upon.

BARON FELIX THÜMEN has offered his rich Mycologic Herbarium for sale. In all it probably contains 20,000 species, from all parts of the world; many of them types, and most of them bearing the labels of the most distinguished mycologists of this country and Europe. The "Mycotheca Universalis" is to be continued. Baron Thümen can be addressed at Vienna, Währing, Schulgasse 1.

## ARTICLES IN JOURNALS.

- BAILEY, W. W.—Mosses, *Am. Nat.* 17. 608.
- BAKER, J. G.—Two new Carices from Central Madagascar (with plate), *Jour. Bot.* 21. 129: Synopsis of the genus *Selaginella*, continued (2 new species). 1. c. 21. 141.
- CELAKOVSKY, DR. L.—Upon some species of the genus *Thymus*, *Flora*, Mar. 11, continued April 1.
- COOKE, M. C.—On *Sphaerella* and its allies, concluded (6 new species, 2 from U. S.), *Jour. Bot.* 21. 136.
- DETMER, W.—Review of Adolph Mayer's paper "On the theory of chemical ferments," *Bot. Zeit.* April 6.
- FISCHER, A.—On cell division in *Closterium* (with plate), *Bot. Zeit.* April 6.
- GOODALE, GEO. L.—Color and Assimilation (a note upon Th. W. Engelmann's device for measuring the assimilative activity of vegetable cells by the effect of the liberated oxygen upon bacteria), *Science*, 1. 332: On the development of chlorophyll and color granules (remarks upon the recent papers of A. F. W. Schimper in *Bot. Zeit.*), 1. c. 1. 421.
- GRAY, ASA.—Notice of Engler's "Essay on the development of the vegetable kingdom, especially on the distribution of floras since the Tertiary period," *Am. Jour. Sci.* 3. 25. 394; with J. HAMMOND TRUMBULL, Review of De Candolle's "Origin of cultivated plants," with annotations upon certain American species, Part II., 1. c. 3. 25. 370.
- GREENE, E. L.—New plants (5, chiefly from the Pacific coast), *Torr. Bull.* 10. 41.
- HANCE, H. F.—A Chinese *Clethra*, *Jour. Bot.* 21. 130.
- HENSLEY, W. B.—On the relations of the fig and the caprifig, *Nature*, 27. 584: A new Afghan plant (a *Tanacetum*), *Jour. Bot.* 21. 135.
- HOFFMANN, DR. H. and DR. EGAN IHNE.—Time of blooming of Phenogams, *Flora*, March 1.
- IHNE, DR. EGAN.—See under "HOFFMANN."
- KOEHNE, E.—Review of J. G. Baker "On contributions to the flora of Central Madagascar," *Bot. Zeit.* March 23.
- KRAUS, CARL.—Investigations upon the sap-pressure of plants (concluded), *Flora*, March 21.
- NYLANDER, W.—New addenda to the lichenography of Europe, *Flora*, March 1.
- PRENTISS, A. N.—Notes on the Adirondacks, *Torr. Bull.* 10. 43.
- REHM, DR.—Review of "Exsiccata of Hungarian Fungi," *Flora*, March 1.
- REINSCH, P. F.—On the alga-like and peculiar one-celled bodies in the coal of Central Russia (2 plates), *Flora*, March 11.
- SCHRENK, JOSEPH.—Notes on the haustoria of some N. Am. parasitic phanerogams (*Comandra umbellata*) (with 3 plates), *Torr. Bull.* 10. 37.
- SPENCER, JAMES.—Recreations in Fossil Botany, No. IX. (Reproductive organs of fossil plants), *Sci. Gossip*, No. 221. 100.
- TRIMEN, HENRY.—*Cinchona Ledgeriana* (a reply to certain remarks by Dr. Kuntze in the Jan. No.), *Jour. Bot.* 21. 131.
- TRUMBULL, J. H.—See under "GRAY."
- TSCHIRCH, A.—Review of H. Heyfelder's paper on "Pharmacognosy of the Vegetable Kingdom," *Bot. Zeit.* March 23.
- TUCKERMAN, EDWARD.—A new *Ramalina* (California), *Torr. Bull.* 10. 43.
- VASEY, GEO.—Two new species of grasses (*Stipa* from Oregon, and *Aristida* from S. Arizona), *Torr. Bull.* 10. 42.
- WARD, LESTER F.—Plant-life past and present, (Synopsis of one of the "Saturday lectures" delivered at the Nat. Mus. Washington), *Science*, 1. 358.
- ZACHARIAS, E.—Upon Albumen, Nuclein, and Plastin, *Bot. Zeit.* March 30.